

REMARKS

Election/Restriction

New claims 26 and 27 were found to be directed to an invention that is independent or distinct from the invention originally claimed and were withdrawn from consideration as being directed to a non-elected invention, pursuant to 37 CFR §1.142(b) and MPEP §821.03. The Action states that since Applicant had received an action on the merits for the originally presented invention, that invention has been constructively elected by original presentation for prosecution on the merits.

Applicant's Response

The withdrawal of claims 26 and 27 is hereby traversed. While the Office Action provides reasons for rendering the restriction requirement, is submitted that the restriction of claims 26 and 27 is still improper under MPEP §803, which states:

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions. (emphasis added) (see pg. 800-4, col. 1, lines 3-6)

The Office Action states that the examination of claim 26 and 27 “would present an extreme burden on the Examiner.” However, the Office Action is completely silent on why the examination of these claims would be such a burden.

In an effort to progress the prosecution of the present case, claim 26 has been amended to address the issues raised in the previous Office Action and claim 27 has been cancelled, without disclaimer or prejudice to refile this claim later in the prosecution.

Reissue Oath

The Office Action restates the same position expressed in the previous Office Action, made final. The present Office Action further states:

Applicant argues that originally field specification (in the Summary of the Invention) sets forth that there are a “number of ways” of preventing refuse from wrapping around the axle of a compaction machine. This is true, but none of the “number of ways” are set forth, and the specification is silent on how there other ways could be

employed.

With respect to the reissue oath, the emphasis on statements found in the specification such as “a number of ways” and “can be formed, for example” are noted, but the originally filed specification is absolutely silent on the cleat-free area being measured against “any” compaction cleat.

Applicant's Response

The restatements made in the present Office Action, regarding the position expressed in the previous Office Action, continue to be respectfully traversed for the same reasons stated in the previous response from Applicant. The disclosure of the parent application discloses and suggests that the width of the cleat-free area of the rim can be measured without reference to the cleats 28 which are secured to the wheel rim. In addition to the passage in column 1, line 66 through column 2, line 15 in the parent patent 5,769,507 ('507), the present specification states (col. 6, lines 13-15 of '507): “The [cleat-free] area 37 extends up to about 10 inches from the inner edge 20 [of the compactor wheel] (see col. 6, lines 15-16 of '507). The cleat-free area “can be formed, for example,” (emphasis added) by removing the inner-most row of compaction cleats (col. 6, lines 16-18 of '507), locating the inner-most row of cleats farther outward from the inner edge of the wheel (col. 6, lines 18-20 of '507) and/or extending the inner edge of the wheel inward (col. 6, lines 28-36 of '507). Please note that the latter option for forming the cleat-free area does not even involve doing anything with the cleats.

Therefore, the inventive cleat-free area is not disclosed as being, necessarily, limited to the width of any compaction cleat. Rather, the cleat-free area was intended to satisfy the “need for a way to ... at least substantially inhibit, cable, rope, wire and other refuse and debris from wrapping around the axle of a compaction machine, behind a compactor wheel mounted on the axle and, thereby, at least reduce ... the rate of waste buildup between a compaction wheel and its axle.” (Col. 1, lines 58-64 of '507). See also col. 1, line 66 to col. 2, line 3 of '507).

In an effort to progress the present prosecution, a supplemental Reissue Declaration is being filed with this amendment, with changes reflecting broader disclosure and teachings found in the present application.

Specification

In the Office Action, the specification was objected to under 37 CFR 1.71 as failing to

adequately teach how to make and/or use the invention, i.e., failing to provide an enabling disclosure. In particular, the Office Action states:

There is no description in the originally filed disclosure as to how wide the cleat-free area must be to be "wide enough that refuse is less likely to be directed toward the axle" of the compaction machine. There is no description of how wide is "wide enough" or what is meant by "less likely" as set forth in claims 21, 23 and 25. Therefore, one of ordinary skill in the art would not be enabled to make and use the invention.

With respect to the specification, a "matter of simple trial and error experimentation" to determine the suitable width of the cleat-free area as argued is not proper support in the specification. The specification is silent on what is "wide enough."

Applicant's Response

It is submitted that the present specification is not silent on what is a wide enough cleat-free area. The present specification expressly states that the cleat-free area at least substantially inhibits refuse like cable, rope and wire from wrapping around the axle of a compaction machine, behind the compactor wheel (i.e., between the wheel and the body of the compaction machine), such that the rate of buildup of such refuse, between the compactor wheel and compaction machine body, is at least reduced (col. 1, line 58 through col. 2, line 3 and col.2, lines 16-18 of '507). Exactly what minimum width for the cleat-free area is needed to obtain at least some reduction in such a build-up of such refuse can vary. By following the teachings of the present specification, it would be a matter of simple trial and error experimentation for a person of ordinary skill in this art to determine a particular minimum width for the cleat-free area that would produce such a benefit.

It is uniformly recognized that even if such information is not known and disclosed in a patent application, the enablement requirement under §112 can still be satisfied even if a person of ordinary skill in the art must conduct a limited degree of experimentation in order to reproduce the invention. See, e.g., Cross v. Iizuka, 753 F.2d 1040, 224 USPQ 739 (Fed. Cir. 1985). In this case, with the teachings of the present application in hand, the person of ordinary skill in this art could simply produce a number of compactor wheels, each having a cleat-free area with a different width, and use the different wheels to compact, for example, a landfill site that contained refuse like cable, rope or wire. The degree of refuse build-up around the axle, between the compactor wheel and the compaction machine body, could be observed and a determination

of a suitable cleat-free area made as a result.

Therefore, it is respectfully submitted that the present specification does provide an enabling disclosure. Accordingly, the objection under §1.71 should be withdrawn.

Rejection of Claims 21-25 – 35 USC § 112

Claims 21-25 were rejected under 35 USC 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Office Action further states:

There is no description in the specification to allow one of ordinary skill in the art to ascertain how wide is “wide enough that refuse is less likely to be directed toward the axle.”

Applicant's Response

The §112 rejection of claims 21-25 is respectfully traversed for the same reasons as discussed above regarding the objections to the present specification under 37 CFR 1.71. Claims 21, 23 and 25 have been amended to more clearly recite the “cleat-free area”. Accordingly, it is respectfully submitted that this §112 rejection be withdrawn.

Rejection of Claims 21-25 and 28 – 35 USC § 103

In the Office Action, claims 21-25 and 28 were rejected under 35 USC 103(a) as being unpatentable over either one of Finley and O'Neill et al. The Office Action states:

Finley and O'Neill et al each teach a compaction wheel comprising a rim and a hub and a plurality of compaction cleats mounted to the face of the rim. A cleat-free area is provided on the rim adjacent the inner edge of the rim. While the references do not specifically state the cleat-free area would make it less likely that refuse would be directed toward the axle, this would have been obvious inasmuch as if the area is cleat-free, then it would be less likely that refuse would be able to adhere to the cleat-free area of the rim and then would be directed toward the axle.

With respect to claims 23 and 25, it is inherent that the wheels would be mounted to compaction machines.

With respect to claim 28, the width the cleat-free area extends across the rim is considered to be preselected.

With respect to the rejection under 35 USC 103(a), both the Finley and the O'Neill patents show compaction wheels with a cleat-free area.

Applicant's Response

The §103 rejection of claims 21-25 and 28 is traversed. As clearly described in the present application (reference number 20 and Figs. 1, 3, 5 and 6), the inner circumferential edge of the wheel rim, recited in the present claims, is the edge of the rim closest to the body of the compaction machine. In addition, the present specification expressly states that the present cleat-free area at least substantially inhibits refuse like cable, rope and wire from being directed toward and wrapping around the axle of the compaction machine, behind the compactor wheel (i.e., between the wheel and the body of the compaction machine), such that the rate of buildup of such refuse, between the compactor wheel and compaction machine body, is at least reduced (col. 1, line 58 through col. 2, line 3 and col.2, lines 16-18 of '507).

There is no disclosure, teaching or suggestion, in either O'Neill et al or Finley, that there is any significance or importance to the distance between the inner row of their respective cleats and the inner edge of the wheel rim on which their cleats are mounted. On the contrary, the focus of O'Neill et al. is on a bar 20 used to remove debris from between respective rows of compaction cleats, and the focus of Finley is on his tamping cleat 7. Neither of these references places any importance on where their respective cleats are located on the wheel. A person of ordinary skill in the art would find no motivation, from either of these references, to place an inner row of the compaction cleats of a compaction machine any particular distance from the inner edge of its compactor wheels. Even if O'Neill et al provided a reason to mount compaction cleats as shown in their Fig. 3, the inner row of cleats shown in Fig. 3 are not mounted a distance that is wide enough to produce the above described benefit of the present inventive cleat-free area. In addition, Finley does not disclose any kind of compaction machine and does not even show his entire wheel or how it is to be mounted on any axle.

Finally, as noted in Applicants previous paper (response to the Final Office Action), the Office Action states that both O'Neill et al. and Finley disclose a cleat-free area adjacent the inner edge of the rim of their respective wheels. If either of these references truly disclosed the "cleat-free area" of the present invention, then these claims should have been rejected under §102. As discussed above, these cited references do not disclose the present inventive "cleat-free area" and provide no disclosure, teaching or suggestion that would motivate the person of ordinary skill to form the present "cleat-free area".

Claims 21, 23 and 25 have been amended to more clearly recite the present inventive cleat-free area, and claim 28 has been cancelled, without prejudice or disclaimer. Therefore, it is submitted that claims 21-25 are not obvious over the art of record in this case. Accordingly, it is requested that this §103 rejection be withdrawn and the claims allowed.

Interference

In the Office Action, it was found that an interference cannot be initiated with claim 28, as the proposed claim count, because claim 28 is not patentable under 35 USC §103 and a prerequisite for an interference under 37 USC 1.606 is that the claim be patentable to the applicant subject to a judgement in the interference. The Office Action further states:

It should be noted that claim 28 does not set forth the same patentable invention as is claimed in the 5,687,799 patent because claim 1 of the patent limits the (axially) outermost row of teeth (cleats) to be positioned immediately adjacent the outer periphery of the drum. While this is thought to mean that the axially outermost cleats are immediately adjacent the *edge* of the rim, this limitation is not found in the proposed count claim 28, and therefore the count claim is of a different scope than the patented claim. As noted in MPEP 2306, applicant must claim the same patentable invention as is claimed in the patent. Accordingly, an interference cannot be based on claim 28.

With respect to the question of interference, Applicant's opinion on the significance of the outermost row of cleats on the wheel of the '799 patent are given no weight. Applicant has not copied a claim from the '799 patent. The proposed count claim 28 has not been found to be allowable.

Applicant's Response

It is respectfully submitted that there is no requirement that, in order to invoke an interference, an Applicant has to copy a claim of the other party. MPEP §2306 states: "An interference may be declared between an application and a patent if the application and patent are claiming the same patentable invention, as defined in 37 CFR 1.601(n), and at least one of the applicant's claims to that invention are patentable to the applicant." Applicant maintains the position that claim 28 is patentable over the art of record and that the distinction raised in the previous Office Action (i.e., that the axially outermost row of cleats are positioned immediately adjacent the outer periphery of the drum) does not provide any patentable distinction between claim 28 and the invention claimed in the '799 patent, as required by 37 CFR 1.601(n).

However, in an effort to progress the interference action, Applicant has cancelled claim 28 and

added new claims 30 and 31 as two new counts on which the interference is to be based. New claims 30 and 31 correspond to claims 1 and 2, respectively, from the '799 patent.

Accordingly, it is respectfully requested that the Examiner propose an interference proceeding between the present case and the '799 patent based, at least in part, on new claims 30 and 31.

Allowable Subject Matter

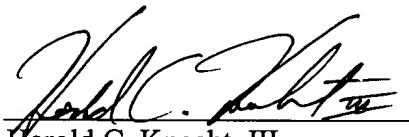
Applicant acknowledges and appreciates the finding, in the Office Action, that claims 1-20, as previously amended, are allowable over the prior art of record.

CONCLUSION

For the foregoing reasons, applicant respectfully submits that claims 1-23, 25 and 26, as amended, and new claims 29-31 are in condition for allowance. It is submitted that no new matter has been added by any of the amendments. In addition, claims 1-10 in the '799 patent are directed to subject matter that is patentably indistinct from at least the present claims 30 and 31. An interference based on the proposed counts is therefore appropriate.

Respectfully submitted,

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Version With Markings to Show Changes Made

Please amend claims 21, 23, 25 and 26 as follows:

21. (Twice Amended) A compactor wheel mountable on an axle of a compaction machine, said compactor wheel comprising:

a hub mountable to an axle of a compaction machine ~~having a body~~;

a rim mounted around the outer circumference of said hub, said rim having a face and an inner circumferential edge and an outer circumferential edge, ~~said hub being mountable to the axle of the compaction machine so that said outer circumferential edge faces away from the body of the compaction machine~~;

a plurality of compaction cleats circumferentially spaced on, transversely spaced across and mounted to said face of said rim; and

an axle guard system comprising a cleat-free area formed circumferentially around said rim on said face and extending widthwise from said inner edge across said rim toward said outer edge, with said cleat-free area being wide enough that, ~~when said compactor wheel is mounted on the axle of the compaction machine, cable, rope and wire refuse [is less likely to] will be at least substantially inhibited from being directed toward and end up wrapped around the axle of the compaction machine on which said compactor wheel is mounted, wherein the rate of buildup of such refuse between said compactor wheel and the body of the compaction machine is at least reduced.~~

23. (Twice Amended) A compaction machine comprising:

a body suitable for compacting refuse, said body having opposite sides;

an axle having two ends and mounting said body; and

a compactor wheel mounted on each end of said axle, one compactor wheel on each side of said body, said compactor wheel comprising:

a hub mountable to said axle;

a rim mounted around the outer circumference of said hub, said rim having a face and an inner circumferential edge and an outer circumferential edge, ~~said inner~~

circumferential edge being closer to said body than said outer circumferential edge;

a plurality of ~~tooth-shaped~~ compaction cleats circumferentially spaced on, transversely spaced across and mounted to said face of said rim; and

an axle guard system comprising a cleat-free area formed circumferentially around said rim on said face and extending widthwise from said inner edge across said rim toward said outer edge, with said cleat-free area being wide enough that ~~cable, rope or wire~~ refuse [is less likely to] will be at least substantially inhibited from being directed toward and end up wrapped around said axle of said compaction machine such that the rate of buildup of such refuse between said compactor wheel and said body is at least reduced.

25. (Twice Amended) A compaction machine comprising:

a body suitable for compacting refuse, said body having opposite sides;

~~two axles, each~~ [an] axle having two ends and mounting said body; and

a compactor wheel mounted on [at least one] ~~each~~ end of ~~each of~~ said axles, ~~each~~ said compactor wheel comprising:

a hub mountable to said axle;

a rim mounted around the outer circumference of said hub, said rim having a face and an inner circumferential edge and an outer circumferential edge, said hub being mounted on said axle so that said inner circumferential edge is closer to said body than said outer circumferential edge;

a plurality of compaction cleats circumferentially spaced on, transversely spaced across and mounted to said face of said rim; and

an axle guard system comprising a cleat-free area formed circumferentially around said rim on said face and extending widthwise from said inner edge across said rim toward said outer edge, with said cleat-free area being wide enough [that] to at least substantially inhibit cable, rope or wire refuse [is less likely to be] from being directed toward [said axle] and end up wrapped around said axle of said compaction machine, wherein the rate of buildup of such refuse on said axle, between said compactor wheel and said body, is at least reduced.

26. (Amended) A method of making a compactor wheel for a compaction machine having a body, said method comprising:

providing a compactor wheel rim having a face and an inner circumferential edge and an outer circumferential edge, with [;

mounting] a plurality of compaction cleats being mounted so as to be circumferentially spaced on and transversely spaced across the face of the rim and [; and

forming] a cleat-free area formed circumferentially around the rim, on the face, that extends widthwise from said inner edge across the rim toward the outer edge, wherein the cleat-free area is [so as to be] wide enough that cable, rope and wire refuse [is less likely to be] are substantially inhibited from being directed toward and end up wrapped around the axle of the compaction machine, between the compactor wheel and the body of the compaction machine.